

Work Order ID 57543

April 8, 2010 8:58:08 AM



Page 1

Item ID: D3723-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bushing

Start Date: 4/08/10 Start Qty: 20.00



Cust Item ID:

Required Date: 4/13/10 Req'd Qty: 20.00

Customer:

Reference:

10-04-08

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3723

Rev A

100

0.00

Lathe Conv

CONVENTIONAL LATHE

Memo

0.00

Conventional Lathe

Turn as per dwg D3723

SA 10/04/11

20

P10-7

110

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

8/10/12

counter
XZD

120

Identify as per dwg & Stock Location: *off*

0.00

Packaging

Memo

0.00

Packaging

10/4/13 (2)

Dart Aerospace Ltd

W/O: 57543		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/4/12	A	Perm change					
	118	QC 2 inspect	SA	10/04/11	20		
		QC 2 second check	SA	10/04/12	20		S 10/04/12
			SA	10.04.14			

Part No: D3723-1 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57543

April 8, 2010 8:58:08 AM



Page 2

Item ID: D3723-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bushing

Start Date: 4/08/10 Start Qty: 20.00



Cust Item ID:

Required Date: 4/13/10 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/14 AJ

Bf 10-4-13
(20)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April 8, 2010 8:58:07 AM

Page 1

Work Order ID: 57543



Parent Item: D3723-1



Parent Item Name: Bushing

Start Date: 4/08/10

Required Date: 4/13/10

Comments: IPP rev. A 08.02.15 New issue EC
IPP Rev:B 08-02-27 rev.A as per ecn 1139 DD verified by:

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MDELNR0.750		Purchased	No			100	f	66.6000	0.4211			



Delrin Round Bar 0.75"



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT050

66.6

112418

34.6

112480

32

52 5A 10/04/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

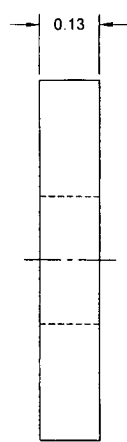
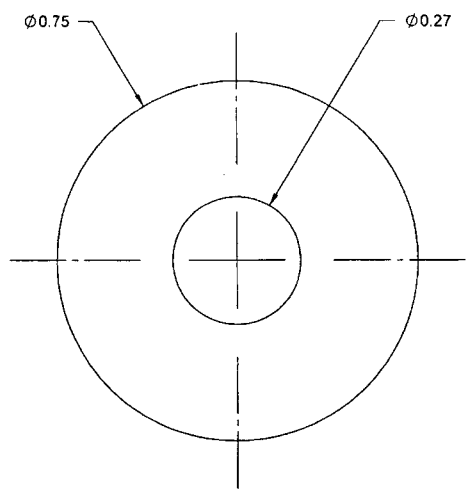
NOTE: Date & initial all entries



The value adding parts of the process are obvious, so companies mistakenly focus on trying to make them go faster. The waste is not obvious, so it is not addressed. Lean focuses on eliminating the waste.

Lean is ongoing, there is no end to the search for waste!

w/o 57543



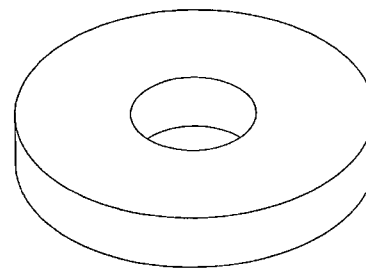
D3723-1 BUSHING

RELEASED
08.02.25

DESIGN	JS	DART AEROSPACE LTD	
DRAWN	JS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JS	DRAWING NO. D3723	REV. A
MFG. APPR.	M	SHEET 2 OF 2	
APPROVED	JS	TITLE	SCALE
DE APPR.	JS	BUSHING	4:1
DATE	08.02.11	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

5S basics

- **Sort (Seiri) (整理):** Sorting. Refers to the practice of going through all the tools, materials, etc., in the work area and keeping only essential items. Everything else is stored or discarded. This leads to fewer hazards and less clutter to interfere with productive work.
- **Set in order (Seiton) (整頓):** Simplifying. Focuses on the need for an orderly workplace. "Orderly" in this sense means arranging the tools and equipment in an order that promotes work flow. Tools and equipment should be kept where they will be used, and the process should be ordered in a manner that eliminates extra motion.
- **Shine (Seisō) (清掃):** Sweeping, Systematic Cleaning, or Shining. Indicates the need to keep the workplace clean as well as neat. At the end of each shift, the work area is cleaned up and everything is restored to its place. The key point is that maintaining cleanliness should be part of the daily work - not an occasional activity initiated when things get too messy.



D3723-1 BUSHING

w/o 57543

RELEASED
08-02-11

NOTES:

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL, ROD
(REF DART SPEC M-DELRIN-R)
OR DELRIN II 150E OR ACETRON GP ACETAL, BAR
(REF DART SPEC M-DELRIN-B)
OR DELRIN II 150E OR ACETRON GP ACETAL, SHEET
(REF DART SPEC M-DELRIN-S.125)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.01 lbs APPROX

A		NEW ISSUE		AJS	08.02.11
REV.		DESCRIPTION		BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWN					
CHECKED		DRAWING NO.			REV. A
MFG. APPR.		D3723			SHEET 1 OF 2
APPROVED		TITLE			SCALE
DE APPR.		BUSHING			NTS
DATE	08.02.11	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			



7 deadly wastes

- 1. Overproduction***
- 2. Rework***
- 3. Transportation***
- 4. Inappropriate / over Processing***
- 5. Unnecessary Inventory***
- 6. Delays / Waiting***
- 7. Unnecessary Motions***